

Work Order ID 71798

Tuesday, July 12, 2011 10:04:39 AM

Page 1

Item ID: D117-762-041

Accept

Revision ID:

Item Name: Replacement Skidtube

Start Date: 7/12/2011 Start Qty: 1.00

Required Date: 7/18/2011 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: 11-8-11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3492

C

D3582

Rev A

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D117-762-041 CHG001

N/A

120

0.00



CNC Bend 1

BENDING MACHINE - SKIDTUBES

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3,
use bending aid DT9632
2- cut fwd end of tube as per dwg

1 0 BE11/07/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

4-Locate DT 8973 & Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8900

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

DL 11/07/13

DL 11/07/14

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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

①

BE 11/07/18

180

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1

0

BE 11/07/19

W/O:		WORK ORDER CHANGES					
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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open X-Bolt holes to finish size as per Dwg D3582, all sections								
	2-Counter Sink X-BOLT holes as per Dwg D3582								
	3-Deburr and blow out chips from inside of tube, prep. tube for welding.								
	4-Bond web as per Dwg D3582 & QSI 015								
	A/R 241 Sike Flex Batch: <u>M 117516</u>								
	Exp Date: <u>12/01/13</u>								
	5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.								
	A/R AL ROD Batch: <u>M12060</u> BE 11/07/20								
	6-Grind welds flush								
	BE 11/07/20								
200	QC10- Inspect visual per QSI004- ground welds	0.00							
QC	Memo	0.00							
Quality Control									

DL 11/07/19

Swisto

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/11/12

215

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Touch-up alodine as per QSI

1 of 11/10/12

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

M117745.
START TIME 7:05
OVEN TEMPERATURE 320
FINISH TIME 7:35

1 of 11-7-21

W/O:		WORK ORDER CHANGES					
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Reference:

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	QC3- Inspect Part Finish	0.00							
QC	Memo	0.00							
Quality Control									
250	HandFinishing	0.00							
HandFinish	Memo	0.00							
Hand Finishing	1-Inspect for Foreign objects								
	2-Install Aft cap as per Dwg D3582, Detail "C"								
	A/R 241 Sika Flex Batch: <u>1117516</u>								
	Exp Date: <u>12/01</u>								
	3-Install Wearplates as per Dwg D3582,								
	Note:Install Bolt and washer on Ground Wire inserts on top of tube see								
	section D-D of dwg D3582								
	*****Do not install bolts where indicated on Dwg(Note #6)*****								
	A/R 241 Sika Flex Batch: <u>1117516</u>								
	Exp Date: <u>12/01</u>								
	4-assemble o-ring as per dwg D3492 and apply o-ring lube								
	A/R 55-o-ring lube batch: <u>1114189</u>								
	5- Wing Walk as per Dwg D3582 and QSI 005 4.4 <u>1117863</u>								

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
270	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-762-041								
	Location: _____								
	PPP Rev: _____								
280	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

11/11/2011 11 02 25 (1)

11/17/2011 (1)

11/17/2011 (1)

11-07-24 (1)

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Tuesday, July 12, 2011 10:04:46 AM

Parent Item: D117-762-041







Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011**Required Date: 7/18/2011**

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 07.06.11 New Issue EC
IPP Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-11 		Manufactured	No			250	Each	14.0000	2	2			
Plug												11/07/21	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP				14					
				70410				2					
				71028				12					
D3492-13 		Manufactured	No			250	Each	40.0000	6	6			
Plug												11/07/21	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP				20					
				71211				20					
				FP-13				5					
				71211				5					
				FP-B				15					
				46693				15					
D3492-9 		Manufactured	No			250	Each	41.0000	2	2			
Plug												11/07/21	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP-A				41					
				46694				41					

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Work Order ID: 71798

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2962-150

Manufactured No

Each

80.0000

1



3.540 Outer Tube, Extrut



BE 11/07/12

Location

Loc Qty

Loc Code

HALL

80

28672

7

59934

73

D2964

Manufactured No

140

Each

19.0000

1

1



Cap



BE 11/07/14

Location

Loc Qty

Loc Code

LG002

19

14101

5

64654

14

D2971

Manufactured No

190

Each

14.0000

1

1



Cross Bolt Spacer



BE 11/07/20

Location

Loc Qty

Loc Code

LG001

14

44445

14

D3584-1

Manufactured No

190

Each

4.0000

1

1



Web



DL
11/07/19

Location

Loc Qty

Loc Code

LG

4

71143

4

70953

8

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Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2973

Manufactured No

190 Each

128.0000

2 2



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG002

128

14636

128

2

D3662-3

Manufactured No

190 Each

15.0000

1 1



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG001

15

44456

15

1

D3662-1

Manufactured No

190 Each

1.0000

3 3



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG001

1

64451

1

36

ALS4-1032-130

Purchased No

Each

2,406.000

36



Insert

Location

Loc Qty

Loc Code

ST281

8

117331

8

ST282

2398

117717

654

118237

1744

X36

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Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-428-165

Purchased

No

Each

517.0000

2



yl 11/07/21

Inserts

Location

Loc Qty

Loc Code

FP

486

117769

486

FP-B

31

114172

31

x2

D2965

Manufactured

No

250

Each

22.0000

1



yl 11/07/21

Cap, 105 Skidtube

Location

Loc Qty

Loc Code

FP006

22

52057

22

x1

D3508-3

Manufactured

No

250

Each

15.0000

1



yl 11/07/21

Wearplate

Location

Loc Qty

Loc Code

FP021

15

38527

1

71210

14

x1

D3508-9

Manufactured

No

250

Each

8.0000

1



yl 11/07/21

Wearplate

Location

Loc Qty

Loc Code

FP021

8

70307

8

x1

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Required Date: 7/18/2011

Start Qty: 1.00



Required Qty: 1.00

D3558-3	Manufactured	No	250	Each	4.0000	1	1
							<u>HL 11/07/12</u>
Gasket							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP014	4	1371651
67486	4	<u>XL</u>

D3558-9	Manufactured	No	250	Each	18.0000	1	1
							<u>HL 11/07/12</u>
Gasket							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP014	18	
55469	4	
71212	14	<u>XL</u>

D3558-11	Manufactured	No	250	Each	9.0000	1	1
							<u>HL 11/07/12</u>
Gasket							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP014	9	
70312	9	<u>XL</u>

D3558-13	Manufactured	No	250	Each	23.0000	1	1
							<u>HL 11/07/12</u>
Gasket							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP014	23	
59558	23	<u>XL</u>

D3508-11	Manufactured	No	250	Each	7.0000	1	1
							<u>HL 11/07/12</u>
Wearplate							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP016	7	1372011
69941	7	<u>HL</u>

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Start Qty: 1.00

Required Qty: 1.00

D3508-13 Manufactured No

250 Each 1.0000 1 1



Wearplate



11/07/21

Location

Loc Qty

Loc Code

FP016

1

65191

1

1371027

x1

AN960JD10L NAS1149D0332J Purchased No

250 Each 0.0000 2 2



Washer

1117087



(x2) 11/07/21

AN3C4A Purchased No

250 Each 1,796.000 28 28



11/07/21

BOLT

Location

Loc Qty

Loc Code

ST350

1796

117313

2

117688

732

x28

117795

500

117872

22

118012

500

118112

40

AN3C5A Purchased No

250 Each 1,255.000 2 2



11/07/21

Bolt

Location

Loc Qty

Loc Code

FP-A

7

115835

7

ST350

1248

116419

28

116549

42

117343

500

117764

300

117872

378

x2

Tuesday, July 12, 2011 10:04:48 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, July 12, 2011 10:04:48 AM

Work Order ID: 71798

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

AN960JD416L NAS1149D0416J Purchased

No

250

Each

19.0000

2

2



Washer

M118131 (x2) JH 1107121

Location

Loc Qty

Loc Code

FP-B

17

110153

17

ST298

2

110153

2

AN960C10L NAS1149C0332 Purchased

No

250

Each

0.0000

28

28



washer

X1118306 (x28) JH 1107121

AN4-4A Purchased

No

250

Each

86.0000

2

2



Bolt

JH 1107121

Location

Loc Qty

Loc Code

FP-B

40

114615

40

ST356

46

114615

46

x2

NAS1611-012 Purchased

No

250

Each

38.0000

6

6



O-RING

JH 1107121

Location

Loc Qty

Loc Code

FP-A

38

113845

38

M1118384

xx

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Tuesday, July 12, 2011 10:04:48 AM

Page 8

Work Order ID: 71798

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 7/12/2011

Required Date: 7/18/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-015

Purchased

No

250

Each

89.0000

2

2



O-RING



u 107121

Location

Loc Qty

Loc Code

FP-A

89

115101

85

116081

4

NAS1611-016

Purchased

No

250

Each

100.0000

2

2



O-RING



u 107121

Location

Loc Qty

Loc Code

FP-A

100

112492

58

113524

42

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

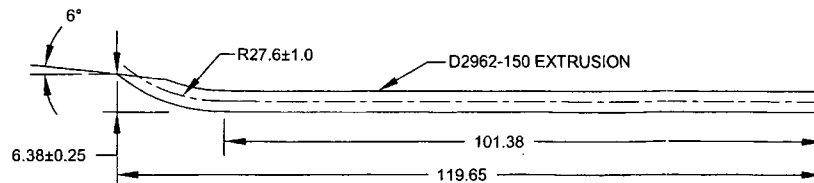
NOTE: Date & initial all entries

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

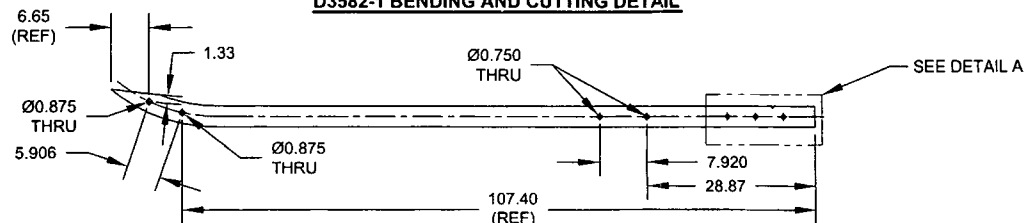
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALST-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

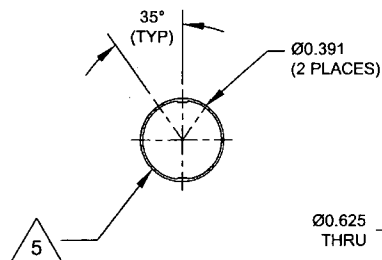
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
 - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
 - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



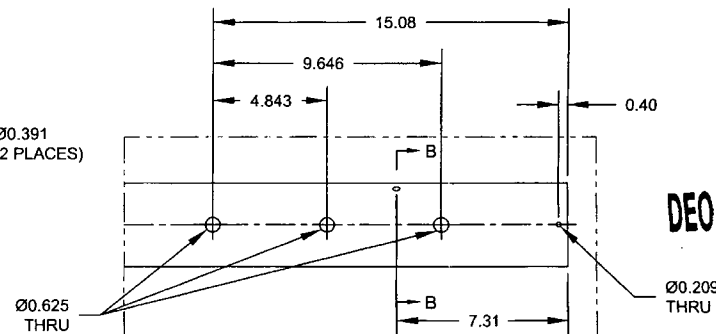
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

DEO ATTACHED

RELEASED
07-11-2007

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71798

REV.	NEW ISSUE	DESCRIPTION	PH	07.06.08
DESIGN	PH		BY	DATE
DRAWN	PH			
CHECKED	PH			
MFG. APPR.	PH			
APPROVED	PH			
DE APPR.	PH			
DATE	07.06.08			

DART AEROSPACE USA, INC
PORT HADLOCK, WA
DRAWING NO. D3582
REV. A
SHEET 1 OF 2
TITLE BK 117 SKIDTUBE ASSEMBLY
SCALE 1:20
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07-11-08-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

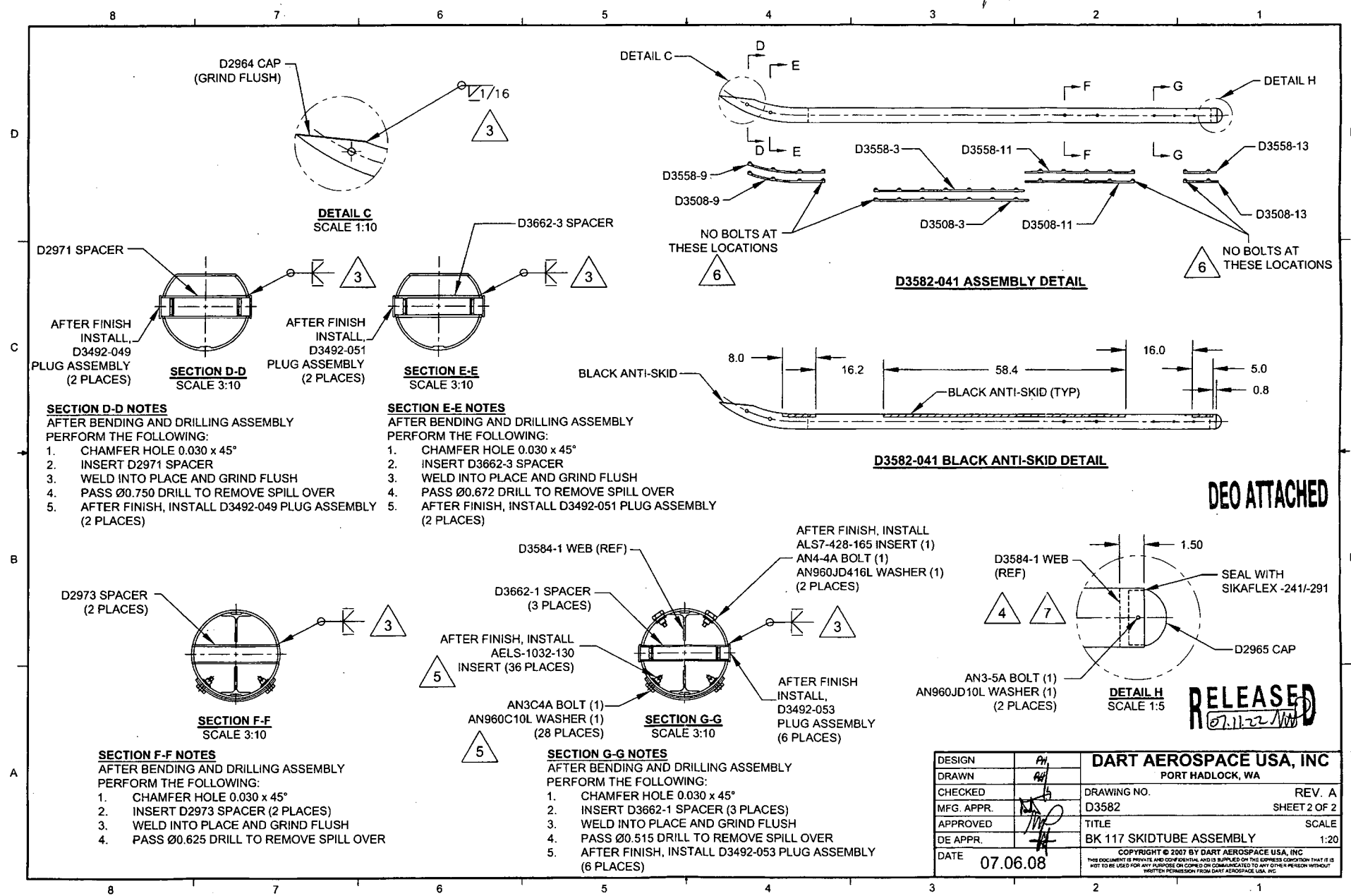
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

71798



DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3582	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	<small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

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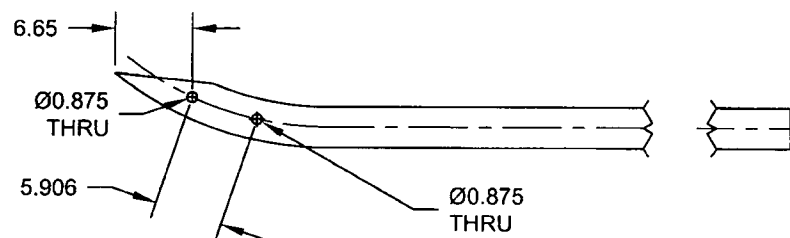
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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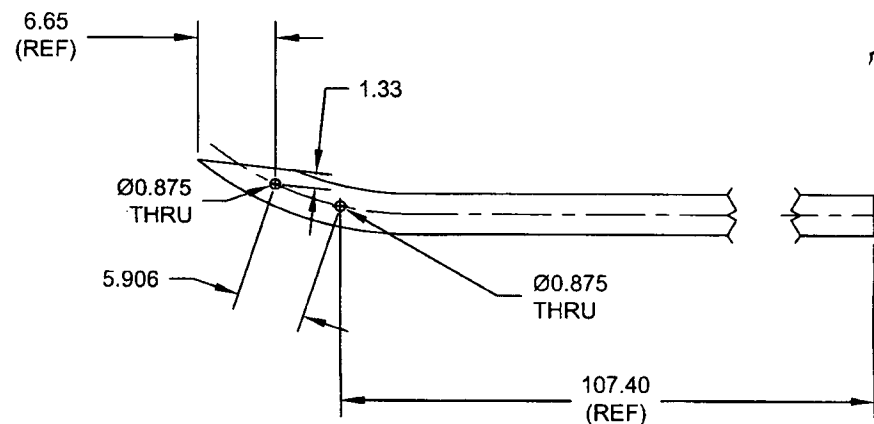
DRAWING NO. D3582	TITLE BK 117 SKIDTUBE ASSEMBLY	REV. A	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3582-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>PH</i>	CHECKED <i>B</i>	MFG. APPR. <i>E</i>	APPROVED <i>MD</i>		DE APPR. <i>MD</i>		
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 19/04/06		DATE 09.04.06		

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



11998

RELEASED
09/04/22 *MD*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

NO. 245

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 65186
Part number: D117-762-041
Description: 117 skid tube
Welding Process: Tig ☒ Mig ☐
Base material: aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐
Undercut: pass ☒ fail ☐
Pin holes: pass ☒ fail ☐
Overlap (cold lap): pass ☒ fail ☐
Porosity (surface): pass ☒ fail ☐
Coloration: pass ☒ fail ☐

Qualifier Sal Luvins Date of Test Coupon 11-01-31

Welder Barclay Elliott Date of Test Coupon 11-01-31

The above named individual is qualified in accordance with AWS D17.1.2001 to weld